

# How exercise may help us flourish – not just physically, but mentally, too

Exercise is linked to a sense of structure and purpose, a new study shows

Our exercise habits may influence our sense of purpose in life and our sense of purpose may affect how much we exercise, according to an interesting new study of the reciprocal effects of feeling your life has meaning and being often in motion. The study, which involved more than 18,000 middle-aged and older men and women, found that those with the most stalwart sense of purpose at the start were the most likely to become active over time, and vice versa.

The findings underscore how braided the relationship between physical activity and psychological well-being can be, and how the effects often run both ways.

Science already offers plenty of evidence that being active bolsters our mental, as well as physical, health. Study after study shows that men and women who exercise are less likely than the sedentary to develop depression or anxiety. Additional research indicates that the reverse can be true, and people who feel depressed or anxious tend not to work out. But most of these studies examined connections between exercise and negative moods. Fewer have delved into positive emotions and their links with physical activity, and fewer still have looked at the role of a strong sense of purpose and how it might influence whether we move, and the other way around.

This omission puzzled Ayse Yemiscigil, a postdoctoral research fellow with the Human Flourishing Program at Harvard University, who studies well-being. “A sense of purpose is the feeling that you get from having goals and plans that give direction and meaning to life,” she says. “It is about being engaged with life in productive ways.” This definition of purpose struck her as overlapping in resonant ways with many

people’s motivations for exercise, she says. “Active people often talk about how exercise gives structure and meaning to their lives,” she says. “It provides goals and achievements.”

In that case, she thought, physical activity plausibly could contribute to a sense of purpose and, likewise, a sense of purpose might influence how likely we are to exercise.

But there was scant evidence to support those ideas. So, for the new study, which was published in April in the *Journal of Behavioral Medicine*, she and her colleague Ivo Vlaev, a professor of behavioural science at the University of Warwick in England, set out to find links, if any, between moving and meaning.

They began by turning to the large and ongoing Health and Retirement Study, which gathers longitudinal data about the lives, attitudes and activities of thousands of American adults aged 50 or older. It asks them at the start about their physical health, background, daily activities and mental health, including if they agree with statements like, “I have a sense of direction and purpose in life,” or “My daily activities often seem trivial and unimportant.” The study’s researchers then checked back after a few years to repeat the queries. Then, Dr Yemiscigil and Dr Vlaev drew records for 14,159 of the participants. To enlarge and enrich their sample, they also gathered comparable data for another 4,041 men and women enrolled in a different study that asked similar questions about people’s physical activities and sense of purpose.

Finally, they collated and compared the results, determining, first, how much and how vigorously people moved, and also how strong their sense of purpose seemed

to be. The researchers then assessed how those disparate aspects of people’s lives seemed to be related to one another over the years, and they found clear intersections. People who started off with active lives generally showed an increasing sense of purpose over the years, and those whose sense of purpose was sturdier in the beginning were the most physically active years later. The associations were hardly outside. Having a firm sense of purpose at one point in people’s lives was linked, later, with the equivalent of taking an extra weekly walk or two. But the associations were consistent and remained statistically significant, even when the researchers controlled for people’s weight, income, education, overall mental health and other factors.

“It was especially interesting to see these effects in older people,” Dr Yemiscigil says, “since many older people report a decreasing sense of purpose in their lives, and they also typically have low rates of engagement in physical activity.” This study was based, though, on people’s subjective estimates of their exercise and purposefulness, which could be unreliable. The findings are also associational, meaning they show links between having a sense of purpose at one point in your life and being active later, or vice versa, so do not prove one causes the other. But Dr Yemiscigil believes the associations are sturdy and rational. “People often report more self-efficacy” after they take up exercise, she says, which might prompt them to feel capable of setting new goals and developing a new or augmented purpose in life. And from the other side, “when you have goals and a sense of purpose, you probably want to be healthy and live long enough to fulfill them.” So, cue exercise, she says. —



## Colon cancer screening now advised for people over 45



Colon cancer rates for people under age 50 have increased significantly over the past 10 years.

In response, the U.S. Preventive Services Task Force has issued revised guidelines that change the recommended starting age for colon cancer screening from age 50 to 45. Screening can include stool tests, endoscopic tests, or computed tomography colonographies and colonoscopies.

Colorectal cancer rates have been rising in seemingly healthy people under age 50 according to recent research, and health officials are taking action. The U.S. Preventive Services Task Force (USPSTF) has issued new guidelines today that recommended colon cancer screening start at age 45 instead of age 50.

Although roughly 90 percent of

colorectal cancer cases happen in people over age 50, cases of colorectal cancer have been rising in adults younger than 50, according to the National Institutes of Health (NIH). A study published Trusted Source in April 2021 in the *Journal of the American Medical Association (JAMA)* found that for the age group 20 to 49, colorectal cancer is estimated to become the leading cause of cancer-related deaths by 2030.

“We are seeing a clear uptick in colorectal cancer in younger generations,” Haddon Pantel, MD, a Yale Medicine colorectal surgeon, said in a statement. The new guidelines come after the USPSTF issued an initial draft recommendation to lower the recommended age to begin colorectal cancer screening from 50 to 45 years old last October. Now, a new compar-

ative modeling study published Trusted Source in *JAMA* confirms not only that routine screening for colorectal cancer reduces lifetime risk of being diagnosed with and dying of the disease, but that the greatest benefit was for those who began screening at age 45. “Far too many people in the U.S. are not receiving this lifesaving preventive service,” says Task Force vice chair Dr. Michael Barry, in a statement released today.

“We hope that this new recommendation to screen people ages 45 to 49, coupled with our long-standing recommendation to screen people 50 to 75, will prevent more people from dying from colorectal cancer.” Screening can include stool tests, endoscopic tests, or computed tomography colonography and colonoscopies. —AFP

## Heating nerves with ultrasound reduces high blood pressure

Drugs for treating high blood pressure (hypertension) do not work in around a third of patients who receive a prescription for them.

The kidneys help to regulate blood pressure by adjusting how much water they extract from the bloodstream. A relatively new technique called renal denervation applies ultrasound to heat overactive nerves that transmit signals to the kidneys.

A new study suggests that the technique can lower blood pressure in patients with drug-resistant hypertension. Hypertension is known as the silent killer because while the condition has few if any symptoms, it increases a person’s risk of potentially fatal heart disease and stroke. The Centers for Disease Control and Prevention (CDC) Trusted Source report that although nearly half of all adults in the United States have hypertension, only about 1 in 4 of these adults have the condition under control. In around a third of patients who take antihypertensives, the drugs either do not work, or patients fail to take them as directed. In people with hypertension, the ability of the kidneys to regulate blood pressure by adjusting how much water they extract from the bloodstream may become compromised. In 2019, *Medical News Today* reported a successful clinical trial of an alternative to drug treatment called renal denervation for people with mild to moderate hypertension. Renal denervation reduces overactivity in nerves that carry signals from the central nervous system to the kidneys, which lowers blood pressure. The technique involves inserting a flexible catheter through a small incision in the groin, then threading it into the artery that supplies blood to each kidney. For several seconds, a device at the tip of the catheter sends controlled bursts of ultrasound (high-frequency sound waves) into the tissue surrounding the artery. The pulses of ultrasound heat up and damage some nerve fibers close to the kidney, reducing their activity. A clinical trial by the same team of researchers now suggests that renal denervation can reduce blood pressure in patients with moderate to severe hypertension who do not respond to drug treatment. —Agencies



## Hypertension may double heart risk for women in middle age

Women in their early 40s with mild hypertension, elevated blood pressure, may be twice as likely as those with normal blood pressure to have a heart attack or unstable angina in their 50s, a new study suggests. While men are more likely than women to have hypertension in their early 40s, damage to arteries appears to begin at lower blood pressures in women. If confirmed, the findings imply that there should be a lower threshold for starting antihypertensive treatment in women. In acute coronary syndromes, which include heart attacks and unstable angina, the flow of blood that normally supplies oxygen to the heart is impaired. In recent decades, the overall incidence of acute coronary syndromes, and the mortality rates associated with these events, have decreased Trusted Source in Western countries. However, these improvements do not appear to include younger women. In some countries, the number of young and middle-aged women hospitalized with acute coronary syndromes has actually increased. There is some evidence that the ad-



## Maulana Tariq Jamil launches ambulance service amid COVID-19 pandemic



Renowned Islamic scholar Maulana Tariq Jamil’s foundation has launched ambulance service for the needy people.

The announcement was made by the Maulana Tariq Jamil (MTJ) Foundation on its Instagram page.

“Molana Tariq Jamil visiting the newly bought ambulances by MTJ Foundation. We are thankful to all the contributors who enabled us buy the ambulances to provide the service in times of need to the needy;” it wrote while sharing pictures of ambulances.

The humanitarian venture by the famed preacher comes as Pakistan is facing third wave of COVID-19 pandemic. Pakistan’s covid-19 death rate surpassed 20,000, on Friday with 102 more people succumbing to the novel virus. According to the National Command and Operation Centre (NCOC), the total number of



people killed in the country has now reached 20,089. Punjab has recorded the most deaths with 9,704 people killed, followed by Sindh with 4,869, Khyber Pakhtunkhwa with 3,875 and Azad Jammu and Kashmir with 523. The remaining deaths have been recorded in Islamabad, Balochistan, and Gilgit-Baltistan. In the last 24 hours, 51,528 assays were conducted, with 3,070 resulting in a

positive result. The total number of coronavirus cases in the United States is 893,461. There are 63,229 active cases, with 4,424 of them being serious. The covid-19 positivity ratio is 5.95 percent, according to NCOC. After more than 6,000 people healed in the last 24 hours, the overall amount of people who have recovered from the lethal virus has now crossed 810,143. —APP